Native Seed Training – Developing the Beast

Mindy Wheeler
BLM Volunteer

Goals of CPNPP

Goal 1
Identify existing and future needs for native plant materials

Goal 2
Follow the National Native Plant Materials Development Program protocol to develop an adequate supply of diverse, economical, and regionally-adapted native plant materials

Goal 3
Identify existing best practices and work with partners to develop and test new methodologies to ensure successful establishment and persistence of native plant materials.

Goal 4
Communicate across agencies, partners, and the public regarding the roles, responsibilities, values, and products of the CPNPP.

Method of Technology Transfer?

Restoration Workshop

-BLM

-USFS

-UDWR (& other state agencies)

-USFWS

Looking for input!!

Rule #1 Know your Audience

- Survey Monkey
- http://www.surveymonkey.com/s/3DXNRW8

1. What is your experience/knowledge regarding the following policies and/or programs.

BLM Integrated Vegetation Management Handbook
BLM direction to use native plant materials for restoration
BLM's native plant materials development program
Great Basin Restoration Initiative
Great Basin Native Plant Selection and Increase Project
Colorado Plateau Native Plant Program

2. Given the BLM directive to increase use of native plants and/or seed in restoration efforts, what would be your rationale for not using them?

Lack of knowledge about native seed
High Cost
Poor Availability
Lower Success (lower rate of establishment)
Other (please specify)

3. What is the extent of land disturbances you are most often dealing with?

Less than 1 acre
Between 1 and 10 acres
10 to 50 acres
More than 50 acres

4. What are the types of disturbances you most often manage (check all that apply)?

Linear (pipeline ROW)
Oil and Gas development sites/areas
Wildfire
Vegetation community/habitat enhancement/vegetation treatments
Other (please specify)

5. Which vegetation cover types most require restoration or enhancement efforts on your Field or District Office (check all that apply)?

Sagebrush
PJ
Riparian
Desert shrub (blackbrush, Mormon tea, mahogany, etc.)
Salt Desert shrub (saltbush, greasewood, etc.)
Mountain Brush (Gambel oak shrublands)
Aspen/Conifer
Other (please specify)

6. Who is most often responsible for the on-the-ground restoration/ revegetation/ rehabilitation?

Contractor
BLM personnel
Other

7. What is an example of a goal of a couple of the restoration projects in which you have been involved (check all that apply)?

Site stabilization
Watershed restoration
Habitat restoration for special status species (e.g. UT prairie dog, sage grouse)
Livestock forage increase
Other (please specify)

8. What is your experience/knowledge regarding the following

Ecotypic variation and seed transfer zones
Seed industry standards and regulations
Seed mix design and procurement
Seeding/ live planting methods and equipment
Monitoring methods after seeding or planting

9. What do you feel is your largest obstacle to initiating and/or implementing restoration projects?

Insufficient funds
Insufficient time
Insufficient knowledge
Insufficient support
Other (please specify)

10. What information do you feel would be most useful to you and your field office with regard to restoration projects (check all that apply)?

Development of revegetation specifications
Determining species/varieties to plant
How to assess seed availability and quality
Characterization of goals for restoration
Principles of restoration
Information on seeding methods and equipment
Other (please specify)

Directed to all Restoration Practitioners

"All Natives all the time!"

"Natives NEVER work!"

"It depends!"

"I don't understand the question"

MW outline

I. CPNPP's Potential role

II. Site Characterization

III. Project Goals (and how to get to those goals)

IV. Planning
V. Site Preparation

IV. Seeding

V. Aftercare/ Monitoring/ Adaptive Management

VI. Info Exchange with CPNPP going forward

ARS Reveg Guidelines

I. Goal Statement

II. Determine Necessity of Revegetation

III. Site characterization

IV. Site Preparation

V. Weeds

VI. Seeding
VII. Planting mature plants

VIII. Assist Establishment

IX. Monitoring/ Long term management

U Wyoming Workshop

I. Reclamation Planning (Goals, Site Characterization)

II. Site prep

III. Surface Water and Erosion

IV. Seeding

V. Monitoring

VI. Wildlife Issues

VII. Costs and Benefits of reclamation

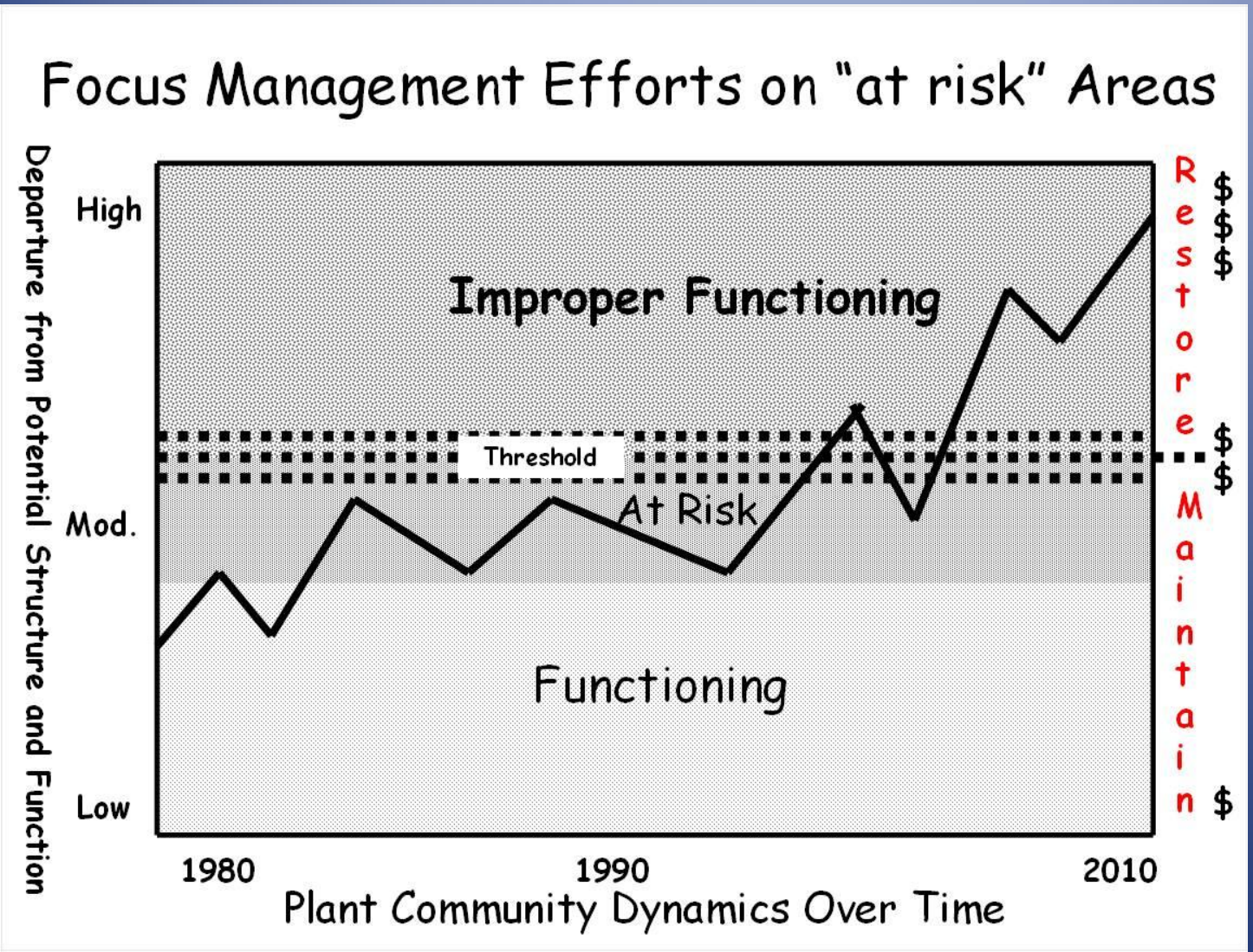
Knowledge of Ecosystem Structure and Function In order to Set Realistic Goals

Need to know where you are to be able to know how you are going to you want to go

?

Restoring Function and Setting Realistic Goals

Prioritization of Restoration Projects



Pellant presentation 2011

Setting Realistic Goals and Subsequent Adaptive Management

ADAPTIVE MANANGEMENT and use of QUANTITATIVE TRIGGERS- Obtain and **maintain** plant composition (by weight) of …

as determined by quantitative sampling

PERSISTENT ISSUE

Disconnect between those who desire and push for native plant materials and those who don't believe it will get them the results they desire

"All natives all the time"

"It depends"

"Natives never work"

"I don't understand the question"

How do we bridge the gap?

Restoration is a moving target!

Seed: Common Name	Seed: Scientific Name	PLS Pounds per acre	Total Pounds	# of Viable Seeds/sq foot	Total Cost
Tall Wheatgrass	Agropyron elongatum	1.83	76	3.36	$201.40
Intermediate Wheatgrass	Agropyron intermedium	1.84	76	3.72	$191.52
Crested Wheatgrass	Agropyron cristatum	1.76	76	7.08	$190.00
Great Basin Wildrye	Elymus cinereus	0.87	38	2.6	$254.98
Annual Sunflower	Helianthus annuus	1.37	57	1.84	$541.50
Forage Kochia	Kochia prostrata	0.7	38	6.58	$224.20
Yellow Sweetclover	Melilotus officinalis	1.34	57	8.02	$156.18
Indian Ricegrass	Oryzopsis hymenoides	1.37	57	4.43	$236.55
Sagebrush, Mountain	Artemisia tridentata vaseyana	0.09	19	5.37	$221.54

Sample of Actual Seed Mix from WRI Website… your thoughts?

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How do we bridge the gap?

- Large scale demonstration sites
  - Restoration database
  - WRI database (UPCD)

Other ideas to improve technology transfer or communication

Use of CPNPP web site to put information on:

- Downloading and using Ecological Site Descriptions
- Sample seed mixes
- Seed mix calculator
- Seed Certification information
- Seed procurement information

Contact info

Mindy Wheeler

mawheeler@blm.gov

(801) 699-5459